



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,890	07/28/2003	Joseph S. Bieganeck	249.304	3853
28785	7590	06/09/2005	EXAMINER	
JOHN R LEY, LCC 5299 DTC BLVD, SUITE 610 GREENWOOD VILLAGE, CO 80111			GUADALUPE, YARITZA	
			ART UNIT	PAPER NUMBER
			2859	
DATE MAILED: 06/09/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/628,890	<b>Applicant(s)</b> BIEGANEK ET AL.	
	<b>Examiner</b> Yaritza Guadalupe McCall	<b>Art Unit</b> 2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 April 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 12-17 and 25 is/are rejected.
- 7) ☒ Claim(s) 9-11, 18-24 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

In response to Amendment filed April 1, 2005

1. The disclosure is objected to because of the following informalities:
  - a. Applicant's attention is directed to page 9, line 16 and page 11, line 29 of the Specification, which makes reference to patent application with serial numbers not in accordance with the Office practices. The Examiner is aware of the amendment to the Specification filed on March 15, 2004. However, this amendment only corrects pages 2 – 4 of the Specification, and does not includes any corrections for pages 9 and 11, where two similar occurrences are noted. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2859

3. Claims 1 – 8, 12 – 17 and 25 are finally rejected under 35 U.S.C. 103 ( a ) as being unpatentable over Applicants Admitted Prior Art [ Hereinafter APA ] in view of Tadin ( US 6,493,958 ).

APA discloses an apparatus for measuring the contour of a human for a custom seat cushion for a wheelchair comprising a clearance measurement device, i.e., trained assistance using his/her fingers ( See page 3, lines 28 – 30 of the Specification ), or pressure mapping device (See page 4, lines 7 – 25 of the Specification ), used for evaluating the contour of an anatomical portion. APA also discloses selecting one of said two methods to be used, and locating the selected device, such as the pressure mapping, on the support contour at the location where the clearance is to be measured, then proceeding to sit the person on the support contour with the clearance measurement applying pressure to a support contour by a person sitting on said support. APA further discloses the step of evaluating the clearance at the desired / predetermined location by the assistance inserting his/her fingers to measure the clearance, or by placing a blanket like device between the support contour and the individual sitting on said blanket like device such that the pressure sensors can be evaluated in order to get the clearance.

APA does not discloses said clearance measurement device deforming in response to the force applied and evaluating the clearance based on the deformation of said clearance device as stated in claim 1. APA does not disclose the piece of impression foam as stated in claim 2. APA does not discloses said foam having a crush characteristic of

Art Unit: 2859

80%- 90% as stated in claims 4 and 5 and a crushing force of 1.50 psi – 1.85 psi as stated in claims 7 and 8.

In regards to claims 1 and 12 - 13: Tadin discloses an apparatus for measuring contour of a human anatomy including an impression block of deformable material such as foam / putty –like substance ( See Column 3, lines 65 – 67 ) which is easily deformed, has little or no memory and retains the deformed shape indefinitely ( See Column 4, lines 1 – 2 ). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to replace the clearance measurement device of the APA with a contour measuring apparatus having a deformable material as taught by Tadin in order to provide a means for determining a contour which is easily deformed, has little or no memory, and retains the deformed shape indefinitely ( See Column 4, lines 1 – 2 ), therefore increasing the accuracy of the measurement.

With respect to the method as stated in claims 1 – 2 and 6: the method of evaluating clearance between a support contour of a seat cushion comprising the steps of selecting a clearance measurement device which deforms in response to force applied thereto ( See Columns 3 and 4 of Tadin, lines 63 – 67 and 1 – 2 respectively ); locating the clearance measurement device on the support contour at a predetermined location where the clearance is to be evaluated ( See pages 3 and 4 of APA, lines 28 – 31 and 7 – 18 respectively ); sitting the person on the cushion with the clearance measurement device located between the anatomical portion and the support contour at the predetermined location where the clearance is to be evaluated; and evaluating the

clearance at the predetermined location by determining the extent to which the clearance measurement device was deformed as a result of the person sitting on the cushion with the anatomical portion adjacent to the support contour at the predetermined location as stated in claims 1 – 27 will be met during the regular operation of the device disclosed by APA and Tadin.

In regards to the method as stated in claim 3 : APA and Tadin discloses an apparatus that uses as the clearance measurement device a piece of impression foam ( 10, See Tadin) having a crush characteristic which collapses the impression foam upon the application of force to the impression foam( See Column 5, lines 17 – 33 ); and evaluating the clearance of the predetermined location by determining the extent of collapse of the impression foam ( taught by the combination of APA and Tadin).

With respect to the crush characteristics as stated in claims 4 – 5 and 7 – 8 : APA and Tadin discloses a contour measuring device having a permanently collapsible foam which is desired to be highly deformable but does not disclose the particular crush characteristic of collapsing 80% – 90%. Tadin also discloses a foam having a hardness / crushing force of about 2 – 25 psi (pounds per square inch ) with little or no memory once collapsed. However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a foam having a crush characteristics in the range of 80% to 90% and a crushing force / hardness of 1.50 psi – 1.85 psi, since it has been held that where the general conditions of a claim are disclosed

Art Unit: 2859

in the prior art, discovering the “optimum range” involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With respect to claims 14 – 17 : the combination of APA and Tadin disclose selecting the clearance measurement device to include a piece of foam having a predetermined thickness prior to using the foam block ( See Tadin, Column 4, lines 17 – 29 ), locating the clearance measuring device on the support contour at the predetermined location where the clearance in to be measured ( See APA, pages 3 and 4 28 – 31 and 7 – 18 respectively ) prior to sitting the person on the cushion with the anatomical portion to be measured adjacent to the support contour and the clearance measuring device.

In regards to claim 25 : APA and Tadin discloses an apparatus for measuring the contour of a human for a custom seat cushion for a wheelchair cushion comprising a clearance measurement device including a deformable foam block.

*Allowable Subject Matter*

4. Claims 9 – 11, 18 – 24 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Response to Arguments*

5. Applicant's arguments filed April 1, 2005 have been fully considered but they are not persuasive.

6. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In this case, the APA teaches a method of measuring and evaluating clearance at the desired / predetermined location by the insertion of fingers to measure the clearance between the support and the individual, or by placing a blanket like device between the support contour and the individual sitting on said blanket like device such that the pressure sensors can be evaluated in order to get the clearance, which is an inaccurate approach. Tadin teaches a method for measuring the clearance between a sole (support) and the individuals foot (anatomical portion) in a highly accurate manner, by using a deformable cushion, which will allow for a detailed evaluation since it provides a true representation of the contour and will give accurate compensation parameters to be used when obtaining the clearance.




Art Unit: 2859

*Conclusion*

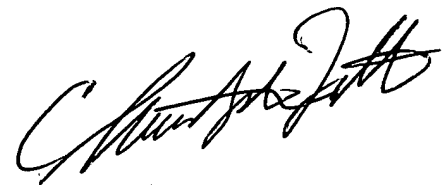
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yaritza Guadalupe-McCall whose telephone number is (571)272 -2244. The examiner can normally be reached on 8:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F.F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Yaritza Guadalupe-McCall  
Patent Examiner  
Art Unit 2859  
June 6, 2005



CHRISTOPHER W. FULTON  
PRIMARY EXAMINER